

ABSTRACT

A method for manufacturing an optical waveguide refractive index grating having a desired grating pitch Λ . The method includes the step of providing a photosensitive waveguide and a writing beam of actinic radiation, the writing beam having an intensity.

- 5 The waveguide is translated relative to the writing beam at a velocity $v(t)$. The intensity of the writing beam is modulated as a function of time at a frequency $f(t)$, wherein

$\frac{v(t)}{f(t)} \approx \Lambda$. The step of modulating the intensity of the writing beam as a function of time

at a frequency $f(t)$ including the step of varying Λ .

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